

A NEW SPECIES OF *PHYLLOCOLPA* BENSON *PHYLLOCOLPA ROLLERI* SP. NOV. (HYM.: TENTHREDINIDAE, NEMATINAE) ON *SALIX HASTATA*

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Abstract

Phyllocolpa rolleri sp. nov. (Hym.: Tenthredinidae, Nematinae) is described from specimens collected on *Salix hastata* in the Lower Tatra Mountains, Slovakia.

Introduction

During the last two days of the Ninth International Sawfly Workshop, held in the Slovak Republic from 17-23 June 2005, the author collected on a mountain summit in the upper montane zone of the Lower Tatras. The fauna and flora at this locality was unusual in that it contained a mixture of montane/subalpine species and those normally considered to be characteristic of warmer sites at much lower altitudes. Several of the montane sawflies collected were associated with *Salix hastata*, including the previously undescribed *Phyllocolpa* species which is the subject of this paper. The full species list of Symphyta collected in the Lower Tatras by participants of the workshop will be presented elsewhere.

Taxonomic study of the genus *Phyllocolpa* has lagged behind that of *Pontania* in recent years. Perhaps this is because the open galls of *Phyllocolpa* (often termed “leaf-folds” or “leaf-rolls”) are less conspicuous than the closed galls of *Pontania*. The latter display a wide range of shape and are often coloured bright red. As indicated by research by J.-P. Kopelke, nearly all species of the gall-making nematine sawfly genera *Phyllocolpa*, *Pontania* and *Euura* are strictly monophagous on single willow species (Kopelke, 2003).

***Phyllocolpa rolleri* sp. nov.**

Female: Head dull with coriaceous sculpture, except for nearly unpunctured clypeus and labrum. Hollow around outside of antennae pubescent. Frontal ridges low, rounded, without lateral carinate extensions above antennae. Antennae long, slender, equal in length to costa of forewing. Antennomeres 3 and 4 subequal. Antennomere 8 is 3.7-3.9x as long as maximal width. Mesonotum dull; sculpture similar to upper head. Mesopleura slightly sculptured on upper third, shining between pubescence below this and with a broad glabrous patch below sterno-pleural line. Scutellum only slightly convex, shining between evenly distributed pubescence except for glabrous posterior third. Post-tergite only pubescent laterally. Basitarsus extremely long and slender (5.5x apical width). Tarsus 0.85-0.88 as long as tibia. Inner hind tibial spur half as long as basitarsus. Abdominal terga and sterna dull with transverse sculpture. Cerci projecting almost as far as tip of sawsheath. Sawsheath and saw as in Figs. 616 & 636 in Benson (1958).

Black. Clypeus, labrum, base of mandibles, more or less apices of palpi, whole of tegula, trochanters, narrow apex of coxa, more or less apices of femora, basal 0.75 of rear tibia, tibial spurs, basal half of stigma white or pale yellow. Tarsus entirely black.

Length: 4-5mm.

Variation: in a few specimens a small triangular, brown fleck is present adjacent to inner top of eye. The pronotum is usually completely black, but may be very narrowly lined with brown on upper posterior edges. Hind femora vary from black lined on fore and rear edges with base all black, to almost entirely black except for the extreme apex.

Male: As female, but stigma darker, with only approximately basal third pale.

Holotype (female): Slovak Republic, Lower Tatras, Krakova holá, 1700-1750m, 48°58.08N 19°38.00E, approx. 12km south of Liptovský Mikuláš, 21-22.06.2005, leg. Liston. Deposited in Deutsches Entomologisches Institut (DEI), Müncheberg.

Paratypes: 22 females and 8 males, same collection data as holotype. Deposited in L. Roller Collection (Bratislava), Deutsches Entomologisches Institut (Müncheberg), Forschungsinstitut Senckenberg (Frankfurt a. M.), National Museums of Scotland (Edinburgh), Zoologische Staatssammlung (Munich).

Etymology: The species name is dedicated to Dr. Ladislav Roller of Bratislava, in appreciation of his efforts in the organisation of the 9th International Sawfly Workshop (2005) in Slovakia.

Biology

Leaf-rolls were numerous on the plants of *Salix hastata* from which the adults were swept. The larvae had not yet emerged from the eggs. The leaf is rolled along nearly its whole length, and twisted around its axis. Although the imagines of *P. rolleri* were merely swept from these plants, there is no doubt that *S. hastata* is the host. This is the only *Salix* species present on this part of the summit. On the north face of the mountain, several hundred metres from where the *Phyllocolpa* were collected, some large patches of *Salix alpina* were present, but close examination of these revealed not a single sawfly of any species, either as adult or larva.

Identification

The new species is readily distinguished from most known Palaearctic species by the combination of very dark colouration (particularly the legs), long cerci and lack of a carina between lateral frontal area and top of head. The structure of the ovipositor sheath, saw and the quality and distribution of body surface sculpture closely resemble *P. coriacea* (Benson, 1953) (on *Salix cinerea*), suggesting that they may be related. *P. coriacea* can best be distinguished by its shorter hind tarsus (only 0.65-0.70 as long as tibia) and paler hind leg colour (coxa with apical half pale, femur at

most narrowly lined with black, tibia with only extreme apex black, basitarsus with at least underside pale).

Remarks

Salix hastata has a wide Eurasian distribution, occurring also in Alaska and North-West Canada. It is therefore probable that *P. rolleri* occurs in other regions apart from the Tatras. Possibly some of the published records of *P. coriacea* from the Alps really refer to *P. rolleri*. The few *Phyllocolpa* species described from within or adjacent to the territory of *Salix hastata* in North America (Smith, 1979) all differ significantly in imaginal morphology from the new species.

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References

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The Sword-grass *Xylena exsoleta* (L.) (Lep.: Noctuidae): Monitoring difficulties

For the last 150 years or more, The Sword-grass *Xylena exsoleta* has declined steadily in Britain. The distribution maps in Heath & Emmet (1983. *Moths and Butterflies of Great Britain and Ireland* vol. 10, Harley Books) and Waring (1992. *Moth Conservation Project News Bulletin 4*. JNCC), show far more former sites than current ones, particularly south of the Scottish Highlands, despite ever-increasing recording effort.

In Scotland, the decline has not been so great. The Sword-grass seems to be holding its own in many parts of north-east Scotland, especially Aberdeenshire. I am fortunate enough to have it on my own land at Ordiquhill, near Cornhill in Banffshire. Because of the concern about its status, I have monitored the species carefully every year since 1990.

Most sightings are at sugar. As so much recording nowadays is done with light traps, this may partly explain the scarcity of recent records. In some autumns, no moths are recorded in my garden Robinson trap, despite regular attendance at the line of sugared fence posts that begins only 20m away. In spring, sugar is still the most reliable method, but captures at light are more frequent. Indeed, the highest single count was 12 in the Robinson trap on 7.iv.1997. This was so untypical that I